

List of Commonly-Used Acronyms at the Idaho National Laboratory (INL)

Note: In common speech, the acronyms listed below are generally pronounced by simply saying the letters comprising their names (e.g. "FBI"). Exceptions to this general rule are noted in the definitions below.

AMWTP – **Advanced Mixed Waste Treatment Project.** The AMWTP is the U.S. Department of Energy's most advanced waste treatment facility and is a cornerstone of the Department Of Energy's commitment to prepare and ship waste out of Idaho.

ATR – Advanced Test Reactor. The ATR is a research reactor that has been operating continuously since 1967, whose primary function is to study the effects of intense radiation on reactor materials and fuels. Irradiation test services are performed for government agencies, private companies, other nation's nuclear agencies and universities. In addition, ATR irradiates targets to produce valuable isotopes for medical, industrial and research applications. Because its internal components are periodically changed out and new components installed, it remains a valuable research and test machine capable of decades more service.

ATR-NSUF – Advanced Test Reactor National Scientific User Facility. In accordance with the Energy Policy act of 2005, the Department of Energy designated the Advanced Test Reactor (ATR) as a National Scientific User Facility in April 2007 to support U.S. leadership in nuclear science and technology. By attracting new research users – universities, laboratories, and industry – the ATR will support basic and applied nuclear research and development, further President Bush's Advanced Energy Initiative, and advance the nation's energy security needs.

B&W – **The Babcock and Wilcox Company (formerly known as BWXT).**B&W has operated facilities at INL since 1991, and has a history that often intertwines with the work that has been done here in Idaho, including naval nuclear propulsion systems design and testing, nuclear component development and manufacturing, and space nuclear applications. They bring to the laboratory a wealth of technical experience in nuclear reactor componentry, as well as experience in leveraging the support of both public and private interests in nuclear energy.

BEA – Battelle Energy Alliance. BEA is a limited liability company wholly owned by Battelle and created to transform INL into the preeminent, multiprogram national laboratory within ten years. BEA is composed of a suite of



independent contractors and nuclear science experts, namely: Battelle, BWXT, Washington Group International, the Electric Power Research Institute, and the Massachusetts Institute of Technology.

CAES – Center for Advanced Energy Studies. CAES (commonly pronounced as "Cayz") is a public/private partnership comprised of the three Idaho public universities, private industry, and the Idaho National Laboratory. CAES integrates resources, capabilities and expertise to create new research capabilities, expand researcher-to-researcher collaborations, and enhance energy-related educational opportunities from a broad energy perspective.

CFA – **Central Facilities Area.** Central Facilities Area is a common support area for work done by INL and by the Idaho Cleanup Project. Key work that is centered at CFA includes security, emergency services, crafts work, transportation services, and highway and railroad maintenance, among other lab-supporting activities.

CWI – CH2M-WG Idaho, LLC. CWI is a limited liability company formed by partners CH2M Hill and the Washington Division of URS Corporation, formerly Washington Group International. CWI is charged with leading the Idaho Cleanup Project, which aims to clean-up legacy nuclear materials at the INL site and reduce risk to workers, the public, the environment, and the Snake River aquifer.

DOE – **The United States Department of Energy.** DOE is a Cabinet-level department of the United States government responsible for energy policy and nuclear safety. Its responsibilities include the nation's nuclear weapons program, nuclear reactor production for the United States Navy, energy conservation, energy-related research, radioactive waste disposal, and domestic energy production. DOE also sponsors more basic and applied scientific research than any other US federal agency; most of this is funded through its system of United States Department of Energy National Laboratories.

DOE-ID – **Department of Energy, Idaho Operations.** DOE-ID is the Idaho-office of the Department of Energy whose goal is to develop and deliver cost-effective solutions to both fundamental and advanced challenges in nuclear energy and other energy resources, national security, and environmental management.



DOE-NE – **The United States Department of Energy's Office of Nuclear Energy.** The mission of DOE-NE is to lead the DOE investment in the development and exploration of advanced nuclear science and technology. NE leads the Government's efforts to develop new nuclear energy generation technologies; to develop advanced, proliferation-resistant nuclear fuel technologies that maximize energy from nuclear fuel; and to maintain and enhance the national nuclear technology infrastructure. NE aims to serve the present and future energy needs of the Nation by managing the safe operation and maintenance of the DOE nuclear infrastructure that provides nuclear technology goods and services. NE manages research laboratories and radiological facilities and is INL's Lead Program Secretarial Officer.

E&E –**Energy, Environment Science & Technology.** E&E is one of three major areas in which INL is pursuing unique science and technology research. E&E integrates nuclear energy research and its unconventional application with other bio and fossil energy systems, advances renewable energy technologies, and develops alternative energy sources and transportation fuels.

GNEP – Global Nuclear Energy Partnership. GNEP (commonly pronounced "jee-nep"), announced by United States Department of Energy Secretary Samuel Bodman on February 6, 2006, is a plan to form an international partnership to reprocess spent nuclear fuel in a way that renders the plutonium in it usable for nuclear fuel but not for nuclear weapons.

ICP – Idaho Cleanup Project. Idaho Cleanup Project. The ICP is dedicated to the safe, environmental cleanup of the Idaho National Laboratory site, which has been contaminated with waste generated from World War II-era conventional weapons testing, government-owned research and defense reactors, laboratory research, and defense missions at other U.S. Department of Energy (DOE) sites.

INTEC – Idaho Nuclear Technology and Engineering Center. INTEC, formerly known as The Idaho Chemical Processing Plant, was established in the 1950s to recover usable uranium in spent fuel from government reactors. The facility underwent an ambitious modernization during the 1980s, when safer, cleaner, and more efficient structures were built to replace most major facilities. In 1998, the plant was renamed the Idaho Nuclear Technology and Engineering Center and today, the more than 800 workers at INTEC have turned their focus to cleanup and protection of the Snake River Plain Aquifer.

MFC – **Materials and Fuels Complex.** The Materials & Fuels Complex, located 28 miles west of Idaho Falls, focuses on research and development of nuclear fuels. Prototypes of new reactor fuels are made and evaluated at MFC.



Pyroprocessing, which uses electricity to separate waste products in the recycling of nuclear fuel, is also researched here. At the Space & Security Power Systems Facility, workers make nuclear batteries (radioisotope thermoelectric generators, called RTGs for short) for use on the nation's space missions. Such batteries are crucial to the nation's deep space missions, which travel to extremely cold regions of space where sunlight is too weak to power photovoltaic cells.

N&HS – **National and Homeland Security.** This critical area of INL's mission includes research, design and demonstration in critical infrastructure protection, nuclear nonproliferation, and defense systems technology. INL's unique geographic assets allow us to bring many N&HS projects up to full-scale demonstration.

NGNP – Next Generation Nuclear Plant. The Next Generation Nuclear Plant (NGNP) is part of the federal government's effort to advance commercial nuclear reactor designs beyond the current generation that is being deployed around the world. Additionally, the NGNP is a key component in the Administration's plans to develop the hydrogen economy. Another important purpose of the advanced nuclear demonstration plant is to produce hydrogen on a large scale. The technology involved in the NGNP is sometimes referred to as the very-high temperature reactor.

NRC – Nuclear Regulatory Commission. is a United States government agency that was established by the Energy Reorganization Act in 1974, and was first opened January 19, 1975. The NRC took over the role of oversight of nuclear energy matters and nuclear safety from the AEC, or Atomic Energy Commission. Like its predecessor, the NRC oversees reactor safety, reactor licensing and renewal, material safety and licensing, and waste management (storage and disposal). The NRC's mission is to regulate the nation's civilian use of byproduct, source, and special nuclear materials to ensure adequate protection of public health and safety, to promote the common defense and security, and to protect the environment

RD&D – Research, Design, and Demonstration.

REC – **Research and Education Campus.** The Research & Education Campus (REC), located in Idaho Falls, is home to INL administration (located in the Engineering Research Office Building and the Willow Creek Building) and a wide variety of other facilities. At the INL Research Center, scientists working in dozens of laboratories conduct cutting-edge research in fields as varied as robotics, genetics, biology, chemistry, metallurgy, computational science and hydropower. INL's Ice Storm supercomputer, ranked 69th fastest in the world, provides the computational power our researchers need. The Center for Advanced



Energy Studies, slated to occupy a new building in the fall of 2008, will house the Energy Policy Institute. Other facilities house National Security programs and INL precision machining and glass shops.

RTC – Reactor Technology Complex. Located 45 miles west of Idaho Falls, the Reactor Technology Complex is engaged in research and development of nuclear reactor technologies. It is home to the Advanced Test Reactor (ATR), the world's most advanced nuclear test reactor.

S&T – Science and Technology.

SMC – **Specific Manufacturing Capability.** Located roughly 50 miles from Idaho Falls, the SMC is the nation's premier facility dedicated to the manufacturing of heavy armor for the U.S. Army's main battle tank, the M1A2 Abrams.